JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

COURSE CODE: 18B11BI612   MAX. MARKS: 15

COURSE NAME: Computer Aided Drug Design

COURSE CREDITS: 3   MAX. TIME: 1 Hour

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. Drug discovery and development is a time consuming process which may take several years to accomplish. In a pandemic situation such as COVID-19, how we can ensure the rapid identification of potential drugs? (CO-1)   [2]

Q2. If the drug target structure is unavailable, which strategies should be employed for screening of potential drugs? (CO-2)   [2]

Q3. The symptoms of HIV and AIDS vary, depending on the phase of infection. Discuss various phase of infection in HIV and their effects on CD4+ cells. (CO-1)   [2]

Q4. SARS-CoV-2 genome codes for several structural and non-structural proteins. Give a brief account of non-structural proteins and their usage in virus multiplication. (CO-2)   [3]

Q5. Lung cancer is the leading cause of cancer deaths worldwide. What should be the strategy to identify a potential drug against lung cancer in the pre-clinical stage? (CO-2)   [3]

Q6. Antiretroviral therapy (ART) is treatment of people infected with human immunodeficiency virus (HIV) using anti-HIV drugs. What is the basis of host-pathogen infection and possible medications known against HIV? (CO-3)   [3]